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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,655	03/31/2004	Kenji Matsumoto	9319S-000710	5957
27572	7590	05/31/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			NGUYEN, HOANG V	
P.O. BOX 828			ART UNIT	
BLOOMFIELD HILLS, MI 48303			PAPER NUMBER	

2821

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/814,655

Applicant(s)

MATSUMOTO ET AL.

Examiner

Hoang V. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 3/31/04.
- 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites “a **second** lens with a **third** radio wave reflective characteristic” in line 6.

The examiner is unclear whether applicants should refer the **second** lens with a **second** radio wave reflective characteristic or with a third-radio-wave reflective characteristic. Examiner will examine the claim with the assumption that the **second** lens having a **second** radio wave reflective characteristic. Clarification/ correction required.

Claims 5-8 are rejected for depending on a rejected base claim 4.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Staney (US 5,512,913).

Regarding claim 1, Stanley (Figures 2, 3 & 7, col 6 line 53 through col 7 line 5) teaches an antenna device comprising a reflector 12; and a receiver 14 facing one side of the reflector, wherein the one side of the reflector is provided with a plurality of different lens shapes 102, 104, 106 and 108 selectively reflecting radio waves with particular frequency ranges to the receiver from among radio waves transmitted toward the reflector, the radio waves reflected by the plurality of different lens shapes including different frequency ranges.

Regarding claims 2 and 3, the antenna structure of Stanley would enable the method of manufacturing comprising the steps as claimed.

Regarding claim 4, Stanley (Figures 2, 3 & 7, col 6 line 53 through col 7 line 5) teaches an antenna device comprising a reflector 12; and a receiver 14 receiving reflected radio waves from one side of the reflector, wherein the one side of the reflector includes a plurality of different lens shapes 102, 104, 106 and 108, the plurality of lens including a first lens 102 with a first radio wave reflective characteristic and a second lens 104 with a second radio wave reflective characteristic, the first and second radio wave reflective characteristics being different to selectively reflect radio waves with particular frequency ranges to the receiver.

Regarding claim 5, as applied to claim 4, Figure 3c of Stanley further teaches a third lens 106 having a third radio wave reflective characteristic which is different from the first and second radio wave reflective characteristics to selectively reflect radio waves with particular frequency ranges to the receiver.

Regarding claim 6, as applied to claim 5, Figure 3c of Stanley further teaches a fourth lens 108 having a fourth radio wave reflective characteristic which is different from the first, second

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and third radio wave reflective characteristics to selectively reflect radio waves with particular frequency ranges to the receiver.

Regarding claim 8, as applied to claim 6, Figure 7 of Staney shows that the first, second, third and fourth radio wave reflective characteristics are defined according to at least one of the diameter, depth, and cross-sectional profile of the first, second, third and fourth lenses.

Allowable Subject Matter

5. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

Staney teaches an antenna device comprising a reflector; and a receiver receiving reflected radio waves from one side of the reflector, wherein the one side of the reflector includes a four different lens shapes with four different radio wave reflective characteristics. Staney, however, fails to further teach the configuration of an array of each of the first, second, third and fourth lenses on the one side of the reflector.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Patent 5,606,334 discloses a reflector antenna having a multiple of different lens surfaces.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang V. Nguyen whose telephone number is (571) 272-1825.

The examiner can normally be reached on Mondays-Fridays from 9:00 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoang Nguyen can be reached on (571) 272-1825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hvn
5/26/05



**HOANG V. NGUYEN
PRIMARY EXAMINER**